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# SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

### Form 19b-4

Proposed Rule Change by

# THE OPTIONS CLEARING CORPORATION

Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Item 1.

#### Text of the Proposed Rule Change

The Options Clearing Corporation ("OCC" or "the Corporation") proposes to amend its By-Laws and Rules as set forth below in order to reflect the implementation of a new method of measuring risk for purposes of setting its margin requirements. Material to be added to OCC's By-Laws and Rules as currently in effect is underlined, and material to be deleted is enclosed in bold brackets.

#### THE OPTIONS CLEARING CORPORATION

**BY-LAWS** 

#### ARTICLE I

#### **Definitions**

Section 1. Unless the context requires otherwise (or except as otherwise specified in the By-Laws), the terms defined herein shall, for all purposes of these By-Laws and the Rules of the Corporation, have the meanings herein specified.

#### A. – L. [unchanged]

M.

(1) – (4) [unchanged]

#### **Margin Assets**

(5) The term "margin assets" means assets that are held by the Corporation as collateral, but shall not include Clearing Fund deposits, positions in cleared contracts, deposits in lieu of margin or stock loan or borrow positions notwithstanding the Corporation's security interest

therein and/or lien thereon. The term "margin" as it appears in the By-Laws and the Rules shall be interpreted as referring to the margin requirement or margin assets as the context requires.

### Margin Requirement

- (6) The term "margin requirement" means the amount, if any by which the minimum expected liquidating value of the positions in cleared contracts and stock loan and borrow positions in an account is less than zero or any greater amount specified by the Corporation as the "margin requirement" in respect of an account pursuant to Rule 601.
- (5) [renumbered as (7) but otherwise unchanged]

#### **Marking Price**

- (8) The term "marking price," as used on any business day in respect of a cleared contract, stock loan or borrow position, underlying interest, or other asset or liability in a Clearing Member account means the most recent market value reasonably ascertainable (or the most recent reasonably ascertainable contract price, in the case of a future), as determined by the Corporation in its discretion, subject to such additional provisions of the By-Laws and Rules as may be applicable to the determination of marking prices for particular cleared contracts, stock loan or borrow positions, underlying interests or other assets or liabilities. The Corporation may, in certain circumstances, use different marking prices for the same asset or liability depending upon the purpose for which the marking price is used.
  - (6) [renumbered as (9) but otherwise unchanged]
  - (7) [renumbered as (10) but otherwise unchanged]
  - (8) [renumbered as (11) but otherwise unchanged]

N.-Z. [unchanged]

RULES

CHAPTER VI

Margin[s]

#### Introduction

The Rules in this Chapter are applicable to the determination of margin requirements, the deposit of margin assets by Clearing Members, and the holding of margin assets by the Corporation. [The Corporation may designate certain classes of fund options as non-equity securities option contracts for purposes of the Rules in this Chapter.]

# Margin Requirements [on Positions in Stock Options, BOUNDs and Stock Loan and Borrow Positions; Risk Margin on Positions in Stock Future]

Rule 601. (a) <u>Deposit of Margin Assets.</u> [Requirements.] Prior to 9:00 A.M. Central Time (10:00 A.M. Eastern Time)] the time specified by the Corporation on every business day, every Clearing Member shall be obligated to deposit with the Corporation, in accordance with the following provisions of this Rule, margin assets with respect to (1) [on] the positions in cleared contracts stock option contracts, stock futures and BOUNDs maintained in each account with the Corporation at the opening of such business day (including positions resulting from Exchange transactions having a settlement time on such business day);[, but excluding short positions in option contracts or BOUNDs for which a deposit in lieu of margin has been made in accordance with the Rules) and (2) [on ]the margin-eligible stock loan positions and stock borrow positions maintained in each account with the Corporation at the opening of such business day (including such positions that were established as a result of Stock Loans initiated on the preceding business day[, but excluding all stock loan positions and stock borrow positions that have been timely identified to the Corporation in accordance with the Corporation's procedures as to be included, respectively, in stock loan baskets and stock borrow baskets]); and (3) any settlement obligations in an account arising from the exercise, assignment, or maturity of any of the foregoing. The minimum amount of margin assets that a Clearing Member is required

to deposit with the Corporation shall be such that the aggregate margin assets deposited in respect of the Clearing Member's account, including the margin assets deposited on such business day, is equal to the margin requirement for such account calculated pursuant to the applicable provisions of this Rule 601. [In addition to the risk margin required to be deposited with the Corporation in accordance with this Rule in respect of stock futures, Clearing Members are also required to make settlement with the Corporation in respect of variation payments on stock futures in accordance with the Rules applicable thereto.]

- (b) Definitions. The following, as used in this Rule, shall have the meanings assigned to them below:
  - (1) The term "stock option" shall mean a stock option contract.
- [(2) The term "class group" shall mean all classes of stock options, all classes of stock futures, all BOUNDs and all stock loan and borrow positions relating to the same underlying security.
  - (3) The term "stock product group" shall mean the aggregate of all class groups.
  - (4) Subject to the provisions of paragraph (d) below, the term "premium margin," used in respect of a long or short position in a series of stock options or BOUNDs on any business day, shall mean a dollar amount equal to the number of option contracts or BOUNDs comprising the position multiplied by (i) the unit of trading and (ii):
    - (A) in the case of an unexercised long position or an unassigned short position in stock options or an unexpired long or short position in BOUNDs, the arithmetic average of the best bid and best offer for options or BOUNDs of that series across all Exchanges listing such series at or about the close of trading on the preceding trading day;
    - (B) in the case of an exercised long position or an assigned short position in stock options, the difference between the exercise price and the marking price of the underlying security;
    - (C) in the case of an expired net long or short position in a BOUND contract which is to be settled in cash, the strike price of the BOUND; or

(D) in the case of an expired net long or short position in a BOUND contract which is to be settled by delivery of the underlying security, the marking price of such underlying security.

For the purposes of margin calculations hereunder, a premium margin shall be treated as positive (i.e., generating a margin requirement) for short positions, and as a negative (i.e., generating a margin credit) for long positions; provided that the opposite shall apply with respect to exercised long positions and assigned short positions in out-of-the-money option contracts. Notwithstanding the foregoing, the Corporation may fix premium margin for long and/or short positions in any series of options or BOUNDs at such amount as it deems necessary or appropriate in the circumstances to protect the respective interests of Clearing Members, the Corporation, and the public.

- (5) The term "out-of-the-money option contract" shall mean either a call option contract with an exercise price that exceeds the marking price of the underlying security or a put option contract with an exercise price that is less than the marking price of the underlying security.
- (6) The term "marking price," as used on any business day in respect of the security underlying any stock option, stock future, BOUND or stock loan or borrow position, shall mean the last reported sale price for such underlying security during regular trading hours (as determined by the Corporation) on the preceding trading day on such national securities exchange or other domestic securities market as the Corporation shall determine. If such underlying security was not traded on such market during regular trading hours, "marking price" shall mean the highest reported asked quotation for such underlying security on such market at or about the close of regular trading hours on such day. Notwithstanding the foregoing, the Corporation may fix any marking price at such amount as it deems necessary or appropriate in the circumstances to protect the respective interests of the Clearing Members, the Corporation, and the public.
- (7) The term "risk margin" shall mean the amount calculated pursuant to paragraph (c)(1)(ii)(C) and, if and to the extent applicable, paragraph (d).
- (8) The term "margin interval" shall mean the maximum daily change in the marking price of an underlying security, upwards or downwards, assumed by the Corporation in projecting potential changes in the liquidating value (cost) of positions in stock options, stock futures, BOUNDs and stock loan and borrow positions for the purpose of calculating risk margin. The Corporation shall fix the margin interval for each underlying security at such amount as the Corporation shall from time to time deem necessary or appropriate to protect the respective interests of Clearing Members, the Corporation, and the public.

- (9) The term "proprietary Market-Maker account" shall mean an account of the type defined in Article I of the By-Laws of the Corporation.
- (10)] (2) The term "offsetting assigned short contract" shall mean, with respect to an exercised stock option, a short contract of the same class to which an exercise notice has been assigned and which has the same exercise settlement date.
- [(11)] (3) The term "underlying interest[ security]," as used in respect of any cleared contract[stock option, stock future or BOUND], shall have the meaning set forth in Article I of the By-Laws and, as used in respect of any stock loan or borrow position, shall mean the Eligible Stock which is the subject of the position.
- [(12) The terms "stock loan position" and "stock borrow position" shall mean, respectively, any margin-eligible stock loan position and any margin-eligible stock borrow position (as these terms are defined in Article I of the By-Laws), excluding any such stock loan position or stock borrow position that has been timely identified to the Corporation in a manner described in Rule 2201 as to be included, respectively, in a stock loan basket or a stock borrow basket].
- Margin <u>Requirement</u> Calculation Accounts Other Than Customers' Accounts (c) and Firm Non-Lien Accounts. The aggregate margin requirement for an account other than a customers' account or firm non-lien account shall be the amount of margin assets, expressed in U.S. dollars, that must be held in the account such that the minimum expected liquidating value of the account after excluding positions covered by deposits in lieu of margin (the "minimum expected liquidating value"), measured at such confidence level as may be selected by the Corporation from time to time, will be not less than zero. To determine the minimum expected liquidating value of the account, the Corporation will revalue the assets and liabilities in the account under a large number of projected price scenarios for underlying interests created by large-scale Monte Carlo simulations that preserve both univariate and multivariate historical attributes of all included underlying interests. The Corporation will use option pricing models to predict the impact of changes in values of underlying interests on positions in cleared contracts. In calculating the minimum expected liquidating value of an account, the Corporation may either value margin assets as provided in Rule 604 or may include margin assets consisting of securities in the Monte Carlo simulations on the same basis as cleared contracts and underlying interests, thus recognizing any historical correlations among the values of margin assets, underlying assets and cleared contracts. If margin assets are included in the Monte Carlo simulations on the same basis as underlying interests, the minimum expected liquidating value at which those assets are valued for purposes of meeting the margin requirement may be greater or less than their current marking prices. However, the dollar amount of the margin requirement shall be unaffected by the method of valuing margin assets and shall always equal the amount of cash margin assets that

would be required in the account to produce a minimum expected liquidating value of zero. Notwithstanding any other provision of this Rule 601, the Corporation may fix the margin requirement for any account or any class of cleared contracts at such amount as it deems necessary or appropriate under the circumstances to protect the respective interests of Clearing Members, the Corporation, and the public. [positions in stock options, stock futures and BOUNDs and stock loan and borrow positions carried in an account with the Corporation other than a customers' account or a firm non-lien account shall be calculated as hereinafter provided:

- (1) Stock Option Product Group Margin. Margin requirements or credits shall be calculated for the stock product group as follows:
  - (i) Futures Spreads.
  - A. The gross long position in each series of stock futures shall be offset against the gross short position in the same series. Margin shall be required only for the net long or short position in each series of stock futures.
  - B. The net long positions and short positions in each class group remaining after step (A) shall be paired into inter-month spreads on a contract-for-contract basis, in such sequence as the Corporation shall prescribe, until all of the long positions or all of the short positions in the class group, as the case may be, have been paired. Risk margin shall be required for each such pair of contracts in such amount as the Corporation shall from time to time prescribe.
  - C. The long or short futures positions remaining unpaired after step (B) shall be subject to risk margin calculated as described in paragraph (c)(1)(ii)(C), together with any option contracts, BOUNDs and stock loan and borrow positions in the same class group.
  - (ii) Option Contracts, Unspread Futures Contracts, BOUNDs and Stock Loan and Borrow Positions.
  - (A) Margin calculations shall be based on positions in stock options and BOUNDs and stock loan and borrow positions determined as follows:
  - (i) The gross long position in each series of options and BOUNDs in the stock product group shall be offset against the gross short position in the same series in such product group. Margin calculations shall be based only on the net long or short position in each such series.

- (ii) The sum of the stock loan positions in each underlying security shall be offset against the sum of the stock borrow positions in the same underlying security. Margin calculations shall be based only on the resulting net stock loan or borrow positions.
- (B) Premium margin shall be calculated for the net long or short position in each series of options and BOUNDs in each class group in the stock product group. The algebraic sum of the premium margin requirements for all net short positions, if any, and the premium margin credits for all net long positions, if any, shall be the premium margin requirement or credit, as the case may be, for each such class group. Stock loan and borrow positions and stock futures shall not be subject to any premium margin requirement.
- (C) Risk margin shall be calculated for all stock options, stock futures (other than futures spreads margined under paragraph (c)(1)(i)), BOUNDs and stock loan and borrow positions in the stock product group as follows:
- (1)For each class group in the stock product group, the Corporation shall project, using such formulas, assumptions, and data as the Corporation deems appropriate, the variation between the liquidating value (cost) of the class group at the marking price of the options, stock futures, BOUNDs and stock loan and stock borrow positions in the class group and the net liquidating value (cost) of such positions in the class group in the event of a change in the marking price to (i) an amount equal to the current marking price plus the applicable margin interval (the "upside price"), (ii) an amount equal to the current marking price minus the applicable margin interval (the "downside price"), and (iii) each amount between the upside price and the downside price that represents an endpoint between any two of the subintervals resulting from dividing the interval between the upside price and the downside price into ten equal subintervals. In projecting the net liquidating value (cost), the cost of liquidating any "unpaired" short position in call options at the upside price, or any "unpaired" short position in put options at the downside price, shall be deemed to be not less than the amount of the premium margin requirement applicable to the "unpaired" short position plus the product of (x) the number of option contracts comprising the "unpaired" short position, (y) the unit of trading, and (z) a percentage of the applicable margin interval deemed appropriate by the Corporation. The Corporation shall assign a positive sign to any variation that represents a deficit and a negative sign to any variation that represents a credit.

- (2) Each variation calculated in step (1) that is negative shall be reduced by such percentage as the Corporation shall have specified for the stock product group.
- (3) All variations calculated in step (1) relating to the upside prices for the class groups comprising the stock product group (with any negative variations adjusted as provided in step (2)) shall be added together algebraically, all such variations relating to the downside prices for such class groups (with any negative variations adjusted as provided in step (2)) shall be added together algebraically, and all such variations relating to each amount described in clause (iii) of step (1) for such class groups (with any negative variations adjusted as provided in step (2)) shall be added together algebraically.
- A minimum risk margin requirement shall be calculated for the stock product group by: (i) multiplying each net short position in the product group (determined, in the case of options and BOUNDs, pursuant to paragraph (1)(ii)(A)(i), and, in the case of stock futures, pursuant to paragraph (1)(i)(C)) times a value determined from time to time by the Corporation; (ii) multiplying each net long position in the product group (determined in the same manner as net short positions are determined pursuant to clause (i)) times the lesser of a value determined from time to time by the Corporation or a value equal to the premium margin credit for such net long position; (iii) multiplying each result obtained pursuant to clauses (i) and (ii) times the applicable unit of trading; (iv) multiplying each net stock loan position and each net stock borrow position in the product group times a value determined from time to time by the Corporation; and (v) determining algebraically on an absolute value basis (i.e., without regard to whether any particular net position is long or short or whether a net stock position is a stock loan position or a stock borrow position) the sum of the values calculated pursuant to clauses (iii) and (iv) for all such net positions and net stock loan and borrow positions. The resultof such calculation shall be treated as positive for all purposes.
- (5) The risk margin requirement for the product group shall be an amount equal to the largest positive number of the amounts calculated pursuant to steps (3) and (4).
- (D) The margin requirement or credit for the stock product group shall be an amount equal to the algebraic sum of (i) the premium margin requirements and credits for the class groups comprising the product group, determined in

accordance with paragraph (1)(B), and (ii) the risk margin requirement for the product group, determined in accordance with paragraph (1)(C).

- (2) Crossover Credit. Any margin credit for the stock product group shall be applied against the margin required pursuant to Rule 602(c) in respect of positions carried in the account.
- (3) Combined Positions. A Clearing Member may direct the Corporation to combine positions carried in firm lien accounts for the purpose of calculating the margin requirement pursuant to this Rule 601 and Rule 602.
- (4) Segregated Futures Account. The provisions of this Rule 601(c) that are applicable to the calculation of margin for stock futures also apply to the calculation of margin in a segregated futures account.]
- (d) Margin Requirement Calculation Customers' Accounts and Firm Non-Lien Accounts. The [aggregate] margin requirement for [positions in stock options, stock futures, BOUNDs and stock loan and borrow positions carried in a customers' account or a firm non-lien account with the Corporation shall be calculated as provided in paragraph (c), except that:
  - (1) [Segregated long positions shall not be offset against short positions for margin calculation purposes. In calculating premium margin and lin [projecting]determining the minimum expected liquidating value of such an account[s (costs) for the purpose of calculating risk margin], segregated long option positions (other than exercised long option positions that are out of the money) shall be valued at zero[.]; and
  - (2) [U]unsegregated option contracts that have been exercised shall cease to be classified as unsegregated for purposes of calculation of margin to be deposited calculating the minimum expected liquidating value from and after the opening of business on the business day following the date of exercise, except to the extent that for any such exercised contract there is carried in the same account an offsetting assigned short contract in the same class of options. If the number of such exercised option contracts of any class of options exceeds the number of offsetting assigned short contracts, such exercised contracts that have the highest premium margin marking prices, up to the aggregate number of offsetting assigned short contracts, shall continue to be classified as unsegregated.
- (e) [Release of Margin. (1) A Clearing Member shall not be entitled by this Rule to the release of margin with respect to exercised and assigned positions in stock options or

settlement obligations resulting therefrom or from the expiration of a BOUND contract or the maturity of a stock future until:

- (A) Where settlement obligations (including settlement obligations resulting from maturing physically-settled stock futures) are discharged broker-to-broker by delivery of the underlying security against payment therefor or vice versa, the first business day after the date on which the Corporation receives satisfactory evidence, in such form as the Corporation may prescribe, of such delivery or payment, as the case may be;
- Where settlement obligations in respect of options are discharged through the facilities of the correspondent clearing corporation, the first business day following the exercise settlement date; and provided that, if prior to 6:00 A.M. Central Time (7:00 A.M. Eastern Time) on such business day the Corporation shall have received a notice from the correspondent clearing corporation to the effect that the Clearing Member (or its Appointed Clearing Member or, in the case of a Canadian Clearing Member described in Rule 913, CDS) has not performed any obligation to the correspondent clearing corporation in respect of any exercised or assigned position or settlement obligation arising therefrom of the Clearing Member or that the correspondent clearing corporation has suspended any such entity or prohibited or limited the access of any such entity to services offered by the correspondent clearing corporation, the Clearing Member shall not be entitled to the release of margin with respect to any exercised or assigned position or settlement obligation arising therefrom until the second business day following the exercise settlement date or, if the Clearing Member (or its Appointed Clearing Member or CDS) still has not performed such obligation to the correspondent clearing corporation as of 4:00 P.M. Central Time (5:00 P.M. Eastern Time) on the first business day following the exercise settlement date, until the business day after the date on which the Corporation receives satisfactory evidence, in such form as the Corporation may prescribe, of the performance of such obligation;
- (C) Where settlement obligations in respect of maturing physicallysettled stock futures are discharged through the facilities of the correspondent clearing corporation, the first time at which the Clearing Member is required to deposit margin with the Corporation after the time at which the settlement obligations are guaranteed by the correspondent clearing corporation;
- (D) In respect of maturing cash-settled stock futures, the first business day after the maturity date; and

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- (E) Where settlement obligations in respect of BOUNDs contracts are
- (2) A Clearing Member shall not be required to maintain margin with respect to any stock loan or borrow positions on and after the business day following the day on which such stock loan or borrow position was actually extinguished.]

Exclusions from Margin Requirement Calculation. The following shall be excluded from the margin requirement calculation for any account pursuant to Rule 601(c) or (d):

settled by the payment of cash, the expiration settlement date.

- (1) exercised, assigned, matured or expired positions in cleared contracts or stock loan and borrow positions and any settlement obligations arising therefrom when the Corporation determines that (i) the Clearing Member's obligations in respect thereof have been fully and irrevocably discharged or (ii) the Corporation no longer has liability in respect thereof.
- (2) short positions in options or BOUNDs for which a deposit in lieu of margin has been made in accordance with the Rules.
- (3) long positions in cleared contracts that have been pledged to a Pledgee in accordance with Rule 614.
  - (4) margin-ineligible stock loan positions and stock borrow positions.
- [(f) Pledged Cleared Securities. Notwithstanding the foregoing provisions of this Rule, in calculating premium margin and in projecting liquidating values (costs) for the purpose of calculating risk margin, long positions in a pledged cleared security carried in a Designated Account (as defined in Rule 614) shall be valued at zero.]

### ... Interpretations and Policies:

.01 A Clearing Member may direct the Corporation to combine positions carried in firm lien accounts for the purpose of calculating a single combined margin requirement for such accounts pursuant to this Rule 601. [For the purposes of paragraphs (b)(4), (b)(6), and (b)(8) of Rule 601, the actions that are to be or that may be performed by the Corporation may be performed by the Chairman, the Management Vice Chairman, the President or the Membership/Margin Committee.]

- .02 Notwithstanding Rule 601, the margin requirement for X-M accounts shall be determined in accordance with the applicable Participating CCO Agreement. [For the purposes of paragraph (c)(1)(ii)(C)(3) of Rule 601, the percentage reduction for the stock product group shall be 70%.
- .03 For the purposes of paragraphs (b)(4), (c)(1)(ii)(C) and (b)(8) of Rule 601, when an underlying security has been converted by a cash merger or similar transaction into a presently exercisable right to receive cash only, and the related options, physically-settled stock futures or BOUNDs have been adjusted to require the delivery of cash in lieu of the underlying security:
- 1. The premium margin for an adjusted option (a "cash option") shall be an amount equal to 100% of the amount by which the cash per share deliverable upon exercise exceeds (in the case of a call) or is less than (in the case of a put) the exercise price of the option.
- 2. If the cash price per share deliverable upon exercise of a cash option does not exceed the exercise price (in the case of a call), or is not less than the exercise price (in the case of a put), the premium margin for the option shall be zero.
- 3. The marking price of an adjusted BOUND (a "cash BOUND") shall be an amount equal to 100% of the cash per share deliverable upon expiration of the BOUND up to, but not exceeding, the strike price of the BOUND.
- 4. The margin interval for a cash option, a cash-settled stock future, an adjusted physically-settled stock future or a cash BOUND shall be zero.
- .04 For the purposes of paragraph (c)(1)(ii)(C)(1) of Rule 601, an "unpaired" short position in call options on any underlying security shall be determined by pairing contracts in net long positions in call options and any net stock loan position against contracts in net short positions in call options, adjusting for any differences in the unit of trading. If the number of contracts in such net short positions exceeds the number of contracts in such net long positions and any net stock loan position, the excess contracts in such net short positions that have the lowest premium margin values shall be deemed to constitute an "unpaired" short position in call options on that underlying security. An "unpaired" short position in put options on any underlying security shall be determined by pairing contracts in net long positions in put options and any net stock borrow position against contracts in net short positions in put options, adjusting for any differences in the unit of trading. If the number of contracts in such net short positions exceeds the number of contracts in such net long positions and any net stock borrow position, the excess contracts in such net short positions that have the lowest premium margin values shall be deemed to constitute an "unpaired" short position in put options on that underlying security.

.05 The values referred to in clauses (c)(1)(ii)(C)(5)(i), (ii) and (iv) of Rule 601 shall each be 1/8.

[Margin on Positions in Non-Equity Options and Stock Loan Baskets and Stock Borrow Baskets; Risk Margin on Positions in Non-Equity Futures]

**RULE 602.** RESERVED. [Rule 602 is deleted in its entirety with the number reserved for future use.]

Forms of Margin Assets

RULE 604. [Required] To satisfy the margin requirements determined under Rule 601, a Clearing Member may deposit margin assets [may be deposited] with the Corporation in the forms specified in paragraphs (a) - (c) of this Rule 604.

(a) - (e) [no change]

(f) Notwithstanding the foregoing, in lieu of any valuation method provided in this Rule 604 with respect to margin assets in the form of securities, the Corporation may elect to value any or all such margin assets pursuant to Rule 601 using the same multivariate analysis applied to underlying interests rather than assigning any fixed dollar value to such margin assets.

## Pledge Program

**RULE 614.** (a) - (h) [unchanged]

(i) Pledgee's Right with Respect to Overpledged Positions. Whenever a Clearing Member exercises or sells a Pledged Cleared Security, an "Overpledged Position" shall be created, and the Pledgee to whom the exercise or sale was allocated pursuant to paragraph (f) shall have the rights set forth in this paragraph (i) in addition to any other rights that it may have against the Clearing Member. The Pledgee shall have no rights against the Corporation with respect to Overpledged Positions except as expressly set forth in this paragraph (i). The Corporation shall, on the morning of the business day ("Report Day") following the exercise or

sale of a Pledged Cleared Security, deliver a written report to the Pledgee and Clearing Member indicating which Pledged Cleared Security has been exercised or sold pursuant to the provisional allocation under subparagraph (f)(1), subject to possible reallocation under subparagraph (f)(2). Prior to 9:00 A.M. Central Time (10:00 A.M. Eastern Time) on the Report Day, every Clearing Member with Overpledged Positions shall be obligated to pay the Corporation an amount ("Overpledged Value Amount"), for each Pledged Cleared Security which gave rise to an Overpledged Position by being exercised or sold, equal to, in the case of options, the product of (a) the unit of trading for the series of options of the Pledged Option multiplied by (b) the current highest asked per unit premium quotation for options of that series on the Exchanges at or about the close of trading on the preceding business day; provided, however, that the Corporation may fix a different Overpledged Value Amount for any stock option [in accordance with its determination to fix the daily options marking price pursuant to Rule 601]. The Corporation shall be authorized to withdraw the Overpledged Value Amount from the Clearing Member's bank account established in respect of the Primary Account. The Corporation shall, as promptly as practicable after it receives the Overpledged Value Amount from the Clearing Member on the Report Day, deposit such amount into the Pledgee's Deposit Account. Upon the deposit of such amount into the Pledgee's Deposit Account, the Pledgee shall have no further rights to the Pledged Options which gave rise to the Overpledged Position or to the proceeds thereof.

If the Corporation fails to receive the Overpledged Value Amount from the Clearing Member on the Report Day, then the following procedures shall apply:

- (1) [unchanged]
- (2) [unchanged]
- (3) [unchanged]
- (4) [unchanged]
- (5) [unchanged]
- (6) If, by reason of the netting pursuant to the Rules of settlement obligations with respect to exercised Treasury securities option contracts or foreign currency option contracts, a Clearing Member that exercised a Pledged Option is not obligated either to deliver or receive the underlying security or currency in settlement, the Corporation shall, in lieu of causing such security or currency to be bought in or sold out, promptly deposit into the Pledgee's Deposit Account an amount equal to the product of the unit of trading and (a) in the case of a call exercise, the excess of the marking price of the underlying security or currency (as defined in the By-Laws[Rule 602]) over the exercise price, or (b)

in the case of a put exercise, the excess of the exercise price over the marking price of the underlying security or currency. If, on the business day preceding the Report Day, the Clearing Member exercised pledged and unpledged options on a particular Treasury security or foreign currency, any netting of settlement obligations pursuant to the Rules shall be deemed for the purposes of this subparagraph to have eliminated settlement obligations, first, as to unpledged options, and then as to pledged options among Pledgees in descending numerical order.

#### **CHAPTER XI**

Suspension of a Clearing Member

# **Open Positions**

Rule 1106.

(a) - (c) [unchanged]

(d) Closing of Positions by Offset. If the Corporation elects or is required pursuant to this Rule to close both long positions and short positions in the same series of cleared contracts carried by a suspended Clearing Member, the Corporation may, in lieu of closing such positions through closing transactions on an Exchange, futures market or security futures market, offset such positions against each other, reducing each position by the same number of contracts; provided that (i) futures or futures options in the segregated futures account may be offset only against other futures or futures options in that account, and (ii) positions in the internal non-proprietary cross-margining account may be offset only against other positions in that account. If the Corporation closes positions in any series of cleared contracts by offset pursuant to the foregoing sentence, the Corporation shall notify the suspended Clearing Member or its representative thereof, and such positions shall be deemed to have been closed at a price equal to (i) in the case of options or BOUNDs, the [per-unit premium margin amount] marking price [(determined in accordance with Rule 601 or Rule 602, as applicable])] for such series on the date when the positions were offset.

#### **CHAPTER XIV**

#### **Treasury Securities Options**

# **Expiration Date Exercise Procedure for Treasury Securities Options**

**RULE 1404.** (a) The expiration date exercise procedures set forth in Rule 805 shall be applicable to American-style Treasury securities option contracts, except that:

- (1) [unchanged]
- (2) the term "closing price," as used in subparagraph (d)(2) of Rule 805 with respect to any Treasury security, shall mean the daily underlying security marking price for such Treasury security as defined in the By-Laws Rule 602.

#### **CHAPTER XVI**

#### **Foreign Currency Options**

# **Expiration Date Exercise Procedure for Foreign Currency Options**

- **RULE 1603.** The expiration date exercise procedures set forth in Rule 805 shall be utilized in connection with foreign currency option contracts, except that:
  - (a) [unchanged]
- (b) the term "closing price," as used in subparagraph (d)(2) of Rule 805 with respect to any underlying currency, shall mean the marking price for such underlying currency as defined in the By-Laws[ Rule 602].

#### CHAPTER XXI

### **Cross Rate Foreign Currency Options**

# **Expiration Date Exercise Procedure for Cross-Rate Foreign Currency Options**

**RULE 2103.** The expiration date exercise procedures set forth in Rule 805 shall be utilized in connection with cross-rate foreign currency option contracts, except that:

- (a) [unchanged]
- (b) the term "closing price," as used in subparagraph (d)(2) of Rule 805 with respect to any foreign currency, shall mean the marking price for such foreign currency as defined in the By-Laws [Rule 602].

#### Margin Requirements

- RULE 2111. [(a) ]Cross-rate foreign currency options shall be included in the calculation of the [daily] margin requirement for [non-equity options in]each account of a Clearing Member pursuant to Rule 601[2;]. [provided, however, that the components of the margin requirement representing cross-rate foreign currency options shall be calculated in the applicable trading currency and converted by the Corporation to U.S. dollars.]
- [(b) Prior to the earliest settlement time for Exchange transactions settled in any trading currency on any foreign business day, the Corporation shall issue to each FX Index Option Clearing Member a report showing a provisional margin requirement for each account maintained by the Clearing Member. The provisional margin requirement for such account shall be equal to the sum of: (i) the margin required in the account on the preceding business day in respect of equity and non-equity options, excluding FX Index Options and cross-rate foreign currency options, as determined in accordance with Chapter VI of the Rules; (ii) any intra-day margin required pursuant to Rule 609; and (iii) the margin required in respect of positions in FX Index Options and cross-rate foreign currency options as such positions have been increased or decreased to reflect Exchange transactions effected on the current business day. The components of the provisional margin requirement representing positions in cross-rate foreign currency

options shall be calculated in the respective trading currencies for such options in accordance with the method set forth in Rule 602 and shall be converted and summed to a single U.S. dollar equivalent.]

Rule 2111 supplements Rules 60[2]1 and 609.

### Interpretations and Policies . . .

.01 For the purpose of calculating the margin requirement as described in this Rule 2111, the marking price of cross-rate foreign currency options shall be calculated in the applicable trading currency and converted by the Corporation to U.S. dollars.

**Daily Cash Settlements** 

#### **RULE 2112.**

- (a) [unchanged]
- (b) [Prior to the earliest settlement time for Exchange transactions settled in any trading currency on each foreign business day, the Corporation shall make available to each Cross-Rate Foreign Currency Clearing Member a report setting forth the provisional margin deficit or excess for such account determined under Rule 2111 above and the net daily premium payable by or to such Clearing Member in each trading currency as determined in accordance with paragraph (a) of this Rule. [In the event that[ such] the net daily premium listed in the report delivered to a Clearing Member pursuant to paragraph (a) of this Rule is payable by [the] such Clearing Member to the Corporation, the Corporation shall be authorized to withdraw such amount from the bank account designated by the Clearing Member in respect of the applicable trading currency at or prior to the settlement time for Exchange transactions settled in such trading currency. [To the extent that any account of a Clearing Member has a provisional margin excess in the form of cash in any trading currency, the Corporation may apply such excess toward the net daily premium payable in such account in the same trading currency.]
  - (c) [One hour after the settlement time for each trading currency, t] The Corporation shall be obligated to [pay ]credit to each Clearing Member any net daily premium amount due from the Corporation to such Clearing Member in such trading currency [on such day] in each account as shown in the report referred to in paragraph ([b]a) of this Rule only to the extent that such amount exceeds[: (i)] the net amount of premiums payable to

the Corporation at a later settlement time (or at an earlier settlement time, but not yet paid) in respect of Exchange transactions in cross-rate foreign currency options in the same account as to which the Corporation received matching trade information on the preceding day[, plus (ii) any margin deficit or less any margin excess determined in accordance with Rule 2111]. Any net daily premiums so credited shall be retained by the Corporation [pursuant to the preceding sentence] and shall be treated as cash margin deposits [and shall be applied to reduce the provisional margin deficit or increase the provisional margin excess for purposes of settlements in trading currencies having a later settlement time. The Clearing Member may obtain the release of premium amounts held as margin to the extent that the Clearing Member makes a timely deposit of additional margin assets to reduce or eliminate the margin deficit plus any net daily premiums payable by the Clearing Member that have not yet been paid]. Premiums held as margin shall be released by the Corporation in accordance with such procedures as the Corporation shall specify.

(d) [unchanged]

Rule 2112 replaces Rules 501, 502(a) and 502(b) and supplements Rule 601[2(a)].

#### CHAPTER XXII

Stock Loan/Hedge Program

### Margin Deposited with Corporation

**RULE 2203.** Each Hedge Clearing Member shall be required to maintain margin <u>assets</u> with the Corporation in respect of its margin-eligible stock loan positions and stock borrow positions. The amount of margin <u>assets</u> required to be deposited shall be as determined pursuant to Rule 601 [or Rule 602, as applicable].

#### **CHAPTER XXIV**

#### Flexibly Structured Index Options Denominated in a Foreign Currency

#### Margin Requirements

#### **RULE 2409.**

- [(a) ]FX Index Options shall be included in the calculation of the [daily] margin requirement for [non-equity options in ]each account of a Clearing Member pursuant to Rule 601[2;]. [provided, however, that the components of the margin requirement representing FX Index Options shall be calculated in the applicable trading currency and converted by the Corporation to U.S. dollars.]
- [(b) Prior to the earliest settlement time for Exchange transactions settled in any trading currency on any foreign business day, the Corporation shall issue to each FX Index Option Clearing Member a report showing a provisional margin requirement for each account maintained by the Clearing Member. The provisional margin requirement for such account shall be equal to the sum of: (i) the margin required in the account on the preceding business day in respect of equity and non-equity options, excluding FX Index Options and cross-rate foreign currency options, as determined in accordance with Chapter VI of the Rules; (ii) any intra-day margin required pursuant to Rule 609; and (iii) the margin required in respect of positions in FX Index Options and cross-rate foreign currency options as such positions have been increased or decreased to reflect Exchange transactions effected on the current business day. The components of the provisional margin requirement representing positions in FX Index Options shall be calculated in the respective trading currencies for such options in accordance with the method set forth in Rule 602 and shall be converted and summed to a single U.S. dollar equivalent.
- (c) The provisional margin requirement calculated for each account of a Clearing Member pursuant to paragraph (b) of this Rule shall be compared to the amount of margin currently on deposit in respect of such account (excluding any net daily premiums payable by the Corporation to the Clearing Member in such account on the current business day in respect of FX Index Options) to determine whether there is a provisional margin excess or deficit with respect to such account. Such provisional margin excess or deficit shall be taken into account in determining the net daily settlement amount for each trading currency as set forth in Rule 2410.]

#### Interpretations and Policies . . .

.01 For the purpose of calculating the margin requirement as described in this Rule 2409, the marking price of cross-rate foreign currency options shall be calculated in the applicable trading currency and converted by the Corporation to U.S. dollars.

**Daily Cash Settlements** 

#### **RULE 2410.**

- (a) [unchanged]
- (b) [Prior to the earliest settlement time for Exchange transactions settled in any trading currency on each foreign business day, the Corporation shall make available to each FX Index Option Currency Clearing Member a report setting forth the provisional margin deficit or excess for such account determined under Rule 2409 above and the net daily premium payable by or to such Clearing Member in each trading currency as determined in accordance with paragraph (a) of this Rule. [In the event that the such net daily premium listed in the report delivered to a Clearing Member pursuant to paragraph (a) of this Rule is payable by [the]such Clearing Member to the Corporation, the Corporation shall be authorized to withdraw such amount from the bank account designated by the Clearing Member in respect of the applicable trading currency at or prior to the settlement time for Exchange transactions settled in such trading currency. [To the extent that any account of a Clearing Member has a provisional margin excess in the form of cash in any trading currency, the Corporation may apply such excess toward the net daily premium payable in such account in the same trading currency.]
- (c) [One hour after the settlement time for each trading currency, t] The Corporation shall be obligated to [pay ]credit to each Clearing Member any net daily premium amount due from the Corporation to such Clearing Member in such trading currency [on such day ]in each account as shown in the report referred to in paragraph ([b]a) of this Rule only to the extent that such amount exceeds[: (i)] the net amount of premiums payable to the Corporation at a later settlement time (or at an earlier settlement time, but not yet paid) in respect of Exchange transactions in FX Index Options in the same account as to which the Corporation received matching trade information on the preceding day[, plus (ii) any margin deficit or less any margin excess determined in accordance with Rule 2409]. Any net daily premiums so credited shall be retained by the Corporation [pursuant to the preceding sentence ]and shall be treated as cash margin deposits [and shall be applied to reduce the provisional margin deficit or increase the

provisional margin excess for purposes of settlements in trading currencies having a later settlement time. The Clearing Member may obtain the release of premium amounts held as margin to the extent that the Clearing Member makes a timely deposit of additional margin assets to reduce or eliminate the margin deficit plus any net daily premiums payable by the Clearing Member that have not yet been paid]. Premiums held as margin shall be released by the Corporation in accordance with such procedures as the Corporation shall specify.

#### (d) [unchanged]

[Rule 2410 replaces Rules 501, 502(a) and 502(b) and supplements Rule 601[2(a)].]

#### Item 2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by the Board of Directors of OCC at a meeting held on January 27, 2004.

Questions regarding the proposed rule change should be addressed to Jean M. Cawley, First Vice President and Deputy General Counsel, at (312) 322-6269.

# Item 3. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

The purpose of this rule change is to reflect the proposed implementation of a new risk management methodology that the Corporation will use to determine the amount of margin assets required to be deposited by a Clearing Member in respect of each account. This new risk management methodology, the System for Theoretical Analysis and Numerical Simulations ("STANS"), will enhance the Corporation's ability to measure the risk of the portfolios in a Clearing Member's accounts more accurately and, therefore, will enable the Corporation to calculate margin requirements more precisely.

#### A. Background

1. <u>The Existing Risk Management Methodology: The Theoretical</u> Intermarket Margining System

Currently, the Corporation applies the Theoretical Intermarket Margining System ("TIMS") for the calculation of Clearing Members' daily minimum margin requirements, for the determination of the size of the Corporation's Clearing Fund, for the computation of additional margin requirements, and for assessing risk in the Hedge Program. TIMS is a univariate risk management methodology which evaluates historical data of approximately 3,000 underlying assets to identify the expected gain or loss on positions that would occur at ten price points for equity instruments, or at twenty price points for non-equity instruments, within a range of likely price movements of each underlying interest. TIMS requires that options, futures, and stock loan and borrow positions that have the same underlying interest be categorized into classes, and every class into one unique product group consisting of one or more related classes. TIMS calculates the total risk of each Clearing Member account as the sum of the worst scenario outcomes of each product group in the account. TIMS recognizes offsetting positions within each Clearing Member account, but only to the extent that the offsetting positions are in the same product group.

Although TIMS has consistently produced sufficient base margin requirements, this methodology has a number of shortcomings that have risk-relevant consequences. Among these are the following:

- Because TIMS requires that each class group belong to only one product group, any offsetting effects among instruments in different product groups are ignored when margin requirements are calculated. This inherent lack of methodological flexibility tends to overestimate portfolio risk, thereby imposing unnecessarily high margin requirements on Clearing Members.
- TIMS assumes perfect correlation of price movements for underlying interests belonging to the same product group. As a result, margin requirements for unhedged product group portfolios are often overstated, and margin requirements for hedged product group portfolios are often understated.
- TIMS calculates the total account risk as the sum of the worst scenario outcomes of all product groups. In that sense, TIMS does not measure the price risk of the total portfolio; rather it measures the price risk of the various sub-portfolios, as represented by product groups. Since portfolio risk can never be larger than the sum of the portfolio components' risks, but could be smaller to the extent of any offsetting relationships, TIMS's aggregation of product group risks results in an upwardly biased estimation of a Clearing Member's portfolio risk.
- TIMS's aggregation methodology often implies an economically impossible correlation (positive or negative) between product groups in an account. Suppose, for example, that an account has a (delta) long position in the broad-based index group and a delta short position in the individual equities group. By aggregating

the risks in these two groups, TIMS implies that a decline in all broad-based indices could exist simultaneously with a rise in all individual equities – an impossible economic scenario.

In analyzing historical data, TIMS focuses on a range of potential price movements. However, covering 99% of all potential price movements does not result in coverage of 99% of all profit/loss outcomes, which is the desired goal. Using the TIMS method, some accounts may have margin requirements covering 98% of profit/loss outcomes while others are covered at 99.9%. These small statistical differences can have large dollar implications.

# 2. The New Risk Management Methodology: The System for Theoretical Analysis and Numerical Simulations

The System for Theoretical Analysis and Numerical Simulations ("STANS") preserves TIMS's analysis of the historical price movements of underlying assets and of the correlation of such price movements among underlying assets. However, STANS evaluates price risk on a portfolio level and more accurately evaluates the correspondence of price movements among underlying assets and, therefore, is able to calculate margin requirements more accurately than TIMS.

STANS is a multivariate risk management methodology that considers the range of likely price movements for each of the approximately 8,000 assets underlying OCC options. STANS measures the historical correlations among the price movements of the different assets. STANS generates simulated returns for all underlying assets based on this historical data,

measures the historical price volatility of each of these underlying assets and evaluates the relationship structure of the entire portfolio. STANS reduces the imprecision produced by TIMS in the following ways:

- Because STANS does not use TIMS's product group concept, STANS recognizes the relationship of each asset class to all other asset classes, rather than recognizing only the relationships among asset classes in the same product group. Therefore, STANS will more accurately identify offsetting positions, and margin requirements will be adjusted downward accordingly.
- STANS identifies a more realistic correlative relationship among underlying
  assets than TIMS. STANS does not exclude opposite moves for positively
  correlated assets. In contrast, price scenarios within the TIMS methodology are
  all concordant.
- Because STANS eliminates product groups, it is able to evaluate the
  interrelationships among all instruments in a Clearing Member's portfolio, rather
  than only within a product group. STANS's estimates of portfolio risk are neither
  upwardly nor downwardly biased.
- STANS generates a distribution of 10,000 potential profit/loss outcomes for the
  entire portfolio rather than simply a range of potential price movements. As a
  result, margin requirements are more precise for every account and, therefore,

STANS ensures that all accounts will have coverage for predicted liquidation outcomes at the selected confidence levels.

These characteristics will improve the accuracy of margin calculations and, as a result, improve the financial stability of the Corporation and the derivatives markets. In addition, STANS allows for easy integration of various types of non-equity products, such as fixed-income related products and commodities. The implementation of STANS thus facilitates joint risk assessment initiatives that can produce clearing and settlement efficiencies beneficial to investors.

#### B. Rule Changes

To reflect the implementation of STANS in OCC's By-Laws and Rules, the Corporation proposes to replace most of Rule 601 and to eliminate Rule 602. Proposed new Rule 601 is conceptual rather than attempting a mechanical, step-wise description of margin requirement calculations. It is therefore more concise than the existing Rule 601. OCC presently calculates margin requirements for equity and non-equity products separately—Rule 601 applies to the former and Rule 602 to the latter. STANS will calculate margin on equity and non-equity products in one integrated set of calculations. Thus, the calculation of margin requirements for all products will be as set forth in new Rule 601 and Rule 602 is proposed to be eliminated. (Because the entire rule is being deleted, we have not set out the deleted text in this rule change.) OCC proposes to delete cross-references to Rule 602 as appropriate throughout the Rules.

Proposed Rule 601(c) contains a basic conceptual description of how, pursuant to STANS, the Corporation will determine the amount of margin assets a Clearing Member is required to deposit with the Corporation. Proposed Rule 601(c) uses the concepts of "margin requirement," "margin assets," "marking prices" and "minimum expected liquidating value" to aid in the description of STANS and margin requirement calculations, and definitions of each of these terms have been included in the proposed amendments to Article I of the By-Laws or Rule 601 as appropriate. The Corporation proposes to delete terms that are defined in the existing Rule 601(b) which are relevant to TIMS and not relevant to STANS.

The definition of "marking price" is quite flexible, and allows OCC to use its discretion in determining marking prices and to use different marking prices for the same asset or liability depending upon the purpose for which a marking price is needed. An example where the latter situation may occur is in the case of stock loan and borrow positions. Marking prices in the stock lending market are determined by the conventions of that market, and OCC would generally observe the prices used in that market for purposes of determining the daily marks passed through OCC between the lender and the borrower. OCC might, however, have a different view of the correct price to use for purposes of calculating the risk of those positions in STANS.

The purpose of proposed Rule 601(e), "Exclusions from Margin Requirement Calculation," is to identify in one place those positions that are excluded from margin requirement calculations altogether. Existing Rule 601(e) indicates that exercised or expired

positions in cleared contracts or stock loan and borrow positions are excluded from margin requirement calculations; Rule 601(a) indicates that short positions in option contracts or BOUNDs for which a deposit in lieu of margin has been made are excluded from margin requirement calculations; Rule 614 indicates that long positions in cleared securities that have been pledged to a Pledgee are excluded from margin requirement calculations; and, by definition, margin-ineligible stock loan positions and stock borrow positions are excluded from margin requirement calculations. Consolidating this provisions in one place facilitates understanding.

The release of margin assets to Clearing Members as described in existing Rule 601(e) has been revised to be clearer and more concise and is now covered in Rule 601(f). The existing Rule contains a somewhat artificial description of margin assets being released under a position-specific determination. Consistent with the more integrated approach of the STANS methodology, proposed Rule 601(f) simply states that OCC will permit the release of margin with respect to a Clearing Member's account if the amount of margin assets in a Clearing Member's account exceeds the amount of margin assets required to be in the account pursuant to Rule 601 and any other obligations of the Clearing Member to OCC have been satisfied.

Existing Rule 2111(b) and Rule 2409(b) envision that a provisional margin requirement will be calculated with respect to cross-rate foreign currency options and FX Index Options. The provisional margin requirement was intended to ensure that the Corporation would not release premiums due to an account of a Clearing Member in a non-U.S. time zone at a time

when it was holding insufficient margin to cover a premium debit in a later time zone and/or increased margin requirements resulting from activity in cross-rate and foreign currency index options since the last U.S. Dollar settlement. The Corporation now proposes to eliminate this provisional margin requirement and will instead simply hold any amounts otherwise payable to a Clearing Member in a different time zone until after the next regular settlement time in the U.S. Experience has shown that Clearing Members often instruct the Corporation to credit any cash from these early settlements to their OCC accounts instead of releasing it, and the amounts involved do not justify the costs of administering the more cumbersome procedure of calculating provisional margin requirements.

#### C. Prior Communications with the Division of Market Regulation

Since June 2003, OCC has been providing information to representatives of the Office of Risk Management and Control of the Division of Market Regulation (the "Division") on the statistical and operational features of the STANS methodology. To become comfortable with the STANS methodology, the Division requested that OCC produce various graphs, simulations, and spreadsheets evidencing STANS's ability to calculate margin requirements more accurately than TIMS. OCC believes that it has responded to all of the Division's inquiries to date and has provided sufficient information for the Division to reach a high degree of comfort with the STANS methodology. The staff of OCC remains available to address any further questions that the Division staff may have.

\* \* \*

The proposed changes to OCC's Rules are consistent with the purposes and requirements of Section 17A of the Securities Exchange Act of 1934, as amended, because they are designed to assure the safeguarding of securities and funds which are in the custody or control of OCC, reduce unnecessary costs to investors by facilitating more accurate margin calculations and, in general, protect investors and the public interest.

In addition, the proposed rule change is not inconsistent with OCC's existing rules, including any other rules proposed to be amended.

### Item 4. Self-Regulatory Organization's Statement on Burden on Competition

OCC does not believe that the proposed rule change would impose any burden on competition.

# Item 5. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants or Others

Written comments were not and are not intended to be solicited with respect to the proposed rule change and none have been received.

### Item 6. Extension of Time Period for Commission Action

OCC does not consent to an extension of the time period specified in Section 19(b)(2) of the Securities Exchange Act of 1934.

# Item 7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

Not applicable.

# Item 8. Proposed Rule Change Based on Rule of Another Self-Regulatory Organization or of the Commission

Not applicable.

### Item 9. Exhibits

Exhibit 1. Completed Notice of Proposed Rule Change for publication in the

Federal Register.

#### **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, The Options Clearing Corporation has caused this filing to be signed on its behalf by the undersigned hereunto duly authorized.

THE OPTIONS CLEARING CORPORATION

By:

William H. Navin

Executive Vice President
and General Counsel

#### **EXHIBIT 1**

#### SECURITIES AND EXCHANGE COMMISSION

(Release No. 34-\_\_\_\_\_; File No. SR-OCC-2004-20

# SELF-REGULATORY ORGANIZATION

Proposed Rule Change By
The Options Clearing Corporation
Relating to a New Risk
Management Methodology

Comments requested within days after the date of this publication.

# I. <u>Self-Regulatory Organization's Statement of the</u> Terms of Substance of the Proposed Rule Change

The purpose of this rule change is to reflect the proposed implementation of a new risk management methodology that the Corporation will use to determine the amount of margin assets required to be deposited by a Clearing Member in respect of each account.

### II. <u>Self-Regulatory Organization's Statement of the Purpose</u> of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of such statements.

### A. <u>Self-Regulatory Organization's Statement of the Purpose</u> of, and Statutory Basis for, the Proposed Rule Change

The purpose of this rule change is to reflect the proposed implementation of a new risk management methodology that the Corporation will use to determine the amount of margin assets required to be deposited by a Clearing Member in respect of each account. This new risk management methodology, the System for Theoretical Analysis and Numerical Simulations ("STANS"), will enhance the Corporation's ability to measure the risk of the portfolios in a Clearing Member's accounts more accurately and, therefore, will enable the Corporation to calculate margin requirements more precisely.

#### A. Background

# 1. <u>The Existing Risk Management Methodology: The Theoretical Intermarket Margining System</u>

Currently, the Corporation applies the Theoretical Intermarket Margining System ("TIMS") for the calculation of Clearing Members' daily minimum margin requirements, for the determination of the size of the Corporation's Clearing Fund, for the computation of additional margin requirements, and for assessing risk in the Hedge Program. TIMS is a univariate risk

management methodology which evaluates historical data of approximately 3,000 underlying assets to identify the expected gain or loss on positions that would occur at ten price points for equity instruments, or at twenty price points for non-equity instruments, within a range of likely price movements of each underlying interest. TIMS requires that options, futures, and stock loan and borrow positions that have the same underlying interest be categorized into classes, and every class into one unique product group consisting of one or more related classes. TIMS calculates the total risk of each Clearing Member account as the sum of the worst scenario outcomes of each product group in the account. TIMS recognizes offsetting positions within each Clearing Member account, but only to the extent that the offsetting positions are in the same product group.

Although TIMS has consistently produced sufficient base margin requirements, this methodology has a number of shortcomings that have risk-relevant consequences. Among these are the following:

- Because TIMS requires that each class group belong to only one product group, any offsetting effects among instruments in different product groups are ignored when margin requirements are calculated. This inherent lack of methodological flexibility tends to overestimate portfolio risk, thereby imposing unnecessarily high margin requirements on Clearing Members.
- TIMS assumes perfect correlation of price movements for underlying interests belonging to the same product group. As a result, margin requirements for unhedged product group portfolios are often overstated, and margin requirements for hedged product group portfolios are often understated.

- of all product groups. In that sense, TIMS does not measure the price risk of the total portfolio; rather it measures the price risk of the various sub-portfolios, as represented by product groups. Since portfolio risk can never be larger than the sum of the portfolio components' risks, but could be smaller to the extent of any offsetting relationships, TIMS's aggregation of product group risks results in an upwardly biased estimation of a Clearing Member's portfolio risk.
- TIMS's aggregation methodology often implies an economically impossible correlation (positive or negative) between product groups in an account. Suppose, for example, that an account has a (delta) long position in the broad-based index group and a delta short position in the individual equities group. By aggregating the risks in these two groups, TIMS implies that a decline in all broad-based indices could exist simultaneously with a rise in all individual equities an impossible economic scenario.
- In analyzing historical data, TIMS focuses on a range of potential price movements. However, covering 99% of all potential price movements does not result in coverage of 99% of all profit/loss outcomes, which is the desired goal. Using the TIMS method, some accounts may have margin requirements covering 98% of profit/loss outcomes while others are covered at 99.9%. These small statistical differences can have large dollar implications.

# 2. <u>The New Risk Management Methodology: The System for Theoretical Analysis and Numerical Simulations</u>

The System for Theoretical Analysis and Numerical Simulations ("STANS") preserves TIMS's analysis of the historical price movements of underlying assets and of the correlation of such price movements among underlying assets. However, STANS evaluates price risk on a portfolio level and more accurately evaluates the correspondence of price movements among underlying assets and, therefore, is able to calculate margin requirements more accurately than TIMS.

STANS is a multivariate risk management methodology that considers the range of likely price movements for each of the approximately 8,000 assets underlying OCC options. STANS measures the historical correlations among the price movements of the different assets. STANS generates simulated returns for all underlying assets based on this historical data, measures the historical price volatility of each of these underlying assets and evaluates the relationship structure of the entire portfolio. STANS reduces the imprecision produced by TIMS in the following ways:

- Because STANS does not use TIMS's product group concept, STANS recognizes the relationship of each asset class to all other asset classes, rather than recognizing only the relationships among asset classes in the same product group. Therefore, STANS will more accurately identify offsetting positions, and margin requirements will be adjusted downward accordingly.
- STANS identifies a more realistic correlative relationship among underlying assets than TIMS. STANS does not exclude opposite moves for positively

correlated assets. In contrast, price scenarios within the TIMS methodology are all concordant.

- Because STANS eliminates product groups, it is able to evaluate the
  interrelationships among all instruments in a Clearing Member's portfolio, rather
  than only within a product group. STANS's estimates of portfolio risk are neither
  upwardly nor downwardly biased.
- STANS generates a distribution of 10,000 potential profit/loss outcomes for the entire portfolio rather than simply a range of potential price movements. As a result, margin requirements are more precise for every account and, therefore, STANS ensures that all accounts will have coverage for predicted liquidation outcomes at the selected confidence levels.

These characteristics will improve the accuracy of margin calculations and, as a result, improve the financial stability of the Corporation and the derivatives markets. In addition, STANS allows for easy integration of various types of non-equity products, such as fixed-income related products and commodities. The implementation of STANS thus facilitates joint risk assessment initiatives that can produce clearing and settlement efficiencies beneficial to investors.

#### B. Rule Changes

To reflect the implementation of STANS in OCC's By-Laws and Rules, the Corporation proposes to replace most of Rule 601 and to eliminate Rule 602. Proposed new Rule 601 is conceptual rather than attempting a mechanical, step-wise description of margin requirement calculations. It is therefore more concise than the existing Rule 601. OCC

presently calculates margin requirements for equity and non-equity products separately—Rule 601 applies to the former and Rule 602 to the latter. STANS will calculate margin on equity and non-equity products in one integrated set of calculations. Thus, the calculation of margin requirements for all products will be as set forth in new Rule 601 and Rule 602 is proposed to be eliminated. (Because the entire rule is being deleted, we have not set out the deleted text in this rule change.) OCC proposes to delete cross-references to Rule 602 as appropriate throughout the Rules.

Proposed Rule 601(c) contains a basic conceptual description of how, pursuant to STANS, the Corporation will determine the amount of margin assets a Clearing Member is required to deposit with the Corporation. Proposed Rule 601(c) uses the concepts of "margin requirement," "margin assets," "marking prices" and "minimum expected liquidating value" to aid in the description of STANS and margin requirement calculations, and definitions of each of these terms have been included in the proposed amendments to Article I of the By-Laws or Rule 601 as appropriate. The Corporation proposes to delete terms that are defined in the existing Rule 601(b) which are relevant to TIMS and not relevant to STANS.

The definition of "marking price" is quite flexible, and allows OCC to use its discretion in determining marking prices and to use different marking prices for the same asset or liability depending upon the purpose for which a marking price is needed. An example where the latter situation may occur is in the case of stock loan and borrow positions. Marking prices in the stock lending market are determined by the conventions of that market, and OCC would generally observe the prices used in that market for purposes of determining the daily marks passed through OCC between the lender and the borrower. OCC might, however, have a

different view of the correct price to use for purposes of calculating the risk of those positions in STANS.

The purpose of proposed Rule 601(e), "Exclusions from Margin Requirement Calculation," is to identify in one place those positions that are excluded from margin requirement calculations altogether. Existing Rule 601(e) indicates that exercised or expired positions in cleared contracts or stock loan and borrow positions are excluded from margin requirement calculations; Rule 601(a) indicates that short positions in option contracts or BOUNDs for which a deposit in lieu of margin has been made are excluded from margin requirement calculations; Rule 614 indicates that long positions in cleared securities that have been pledged to a Pledgee are excluded from margin requirement calculations; and, by definition, margin-ineligible stock loan positions and stock borrow positions are excluded from margin requirement calculations. Consolidating this provisions in one place facilitates understanding.

The release of margin assets to Clearing Members as described in existing Rule 601(e) has been revised to be clearer and more concise and is now covered in Rule 601(f). The existing Rule contains a somewhat artificial description of margin assets being released under a position-specific determination. Consistent with the more integrated approach of the STANS methodology, proposed Rule 601(f) simply states that OCC will permit the release of margin with respect to a Clearing Member's account if the amount of margin assets in a Clearing Member's account exceeds the amount of margin assets required to be in the account pursuant to Rule 601 and any other obligations of the Clearing Member to OCC have been satisfied.

Existing Rule 2111(b) and Rule 2409(b) envision that a provisional margin requirement will be calculated with respect to cross-rate foreign currency options and FX Index Options. The provisional margin requirement was intended to ensure that the Corporation would not release premiums due to an account of a Clearing Member in a non-U.S. time zone at a time when it was holding insufficient margin to cover a premium debit in a later time zone and/or increased margin requirements resulting from activity in cross-rate and foreign currency index options since the last U.S. Dollar settlement. The Corporation now proposes to eliminate this provisional margin requirement and will instead simply hold any amounts otherwise payable to a Clearing Member in a different time zone until after the next regular settlement time in the U.S. Experience has shown that Clearing Members often instruct the Corporation to credit any cash from these early settlements to their OCC accounts instead of releasing it, and the amounts involved do not justify the costs of administering the more cumbersome procedure of calculating provisional margin requirements.

#### C. Prior Communications with the Division of Market Regulation

Since June 2003, OCC has been providing information to representatives of the Office of Risk Management and Control of the Division of Market Regulation (the "Division") on the statistical and operational features of the STANS methodology. To become comfortable with the STANS methodology, the Division requested that OCC produce various graphs, simulations, and spreadsheets evidencing STANS's ability to calculate margin requirements more accurately than TIMS. OCC believes that it has responded to all of the Division's inquiries to date and has provided sufficient information for the Division to reach a high degree of comfort

with the STANS methodology. The staff of OCC remains available to address any further questions that the Division staff may have.

\* \* \*

The proposed changes to OCC's Rules are consistent with the purposes and requirements of Section 17A of the Securities Exchange Act of 1934, as amended, because they are designed to assure the safeguarding of securities and funds which are in the custody or control of OCC, reduce unnecessary costs to investors by facilitating more accurate margin calculations and, in general, protect investors and the public interest.

In addition, the proposed rule change is not inconsistent with OCC's existing rules, including any other rules proposed to be amended.

### B. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

OCC does not believe that the proposed rule change would impose any burden on competition.

# C. <u>Self-Regulatory Organization's Statement on Comments on the</u> <u>Proposed Rule Change Received from Members, Participants or Others</u>

Written comments were not and are not intended to be solicited with respect to the proposed rule change and none have been received.

### III. <u>Date of Effectiveness of the Proposed Rule Change</u> and Timing for Commission Action

Within 35 days of the date of publication of this notice in the <u>Federal Register</u> or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds

such longer period to be appropriate and publishes its reasons for so finding, or (ii) as to which the self-regulatory organization consents, the Commission will:

- (A) by order approve the proposed rule change, or
- (B) institute proceedings to determine whether the proposed rule change should be disapproved.

### IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

#### Electronic Comments:

- Use the Commission's Internet comment form (<u>http://www.sec.gov/rules/sro.shtml</u>); or
- Send an e-mail to <a href="mailto:rule-comments@sec.gov">rule-comments@sec.gov</a>. Please include File Number xx on the subject line.

#### Paper Comments:

 Send paper comments in triplicate to Jonathan G. Katz, Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609.

All submissions should refer to File Number XX. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all

comments on the Commission's Internet Web site (<a href="http://www.sec.gov/rules/sro.shtml">http://www.sec.gov/rules/sro.shtml</a>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, N.W., Washington, D.C. 20549. Copies of such filing will also be available for inspection and copying at the principal office of the above-mentioned self-regulatory organization. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number XX and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission by the Division of Market Regulation, pursuant to delegated authority.

Secretary

Dated:	